

MADHAV SUKUMARAN

NIH-Cambridge Scholar 2006

Degrees: Columbia University, B.S., Engineering, 2005 and B.A., Humanities and the Arts, 2006

Research Interests: Biophysics, Biochemistry, Biomedical Engineering



Madhav Sukumaran graduated from Columbia University with a Bachelors of Science in Biomedical Engineering and a Bachelor of Arts in Political Science, History, and Biophysics. Since the summer of 2003, Madhav has worked independently on numerous projects in the lab of Professor John Hunt at Columbia University. His contribution to one project was the completion of the biophysical characterization of the amino-terminal domain of MEC-4, a mechanosensitive sodium channel in *C. elegans*, showing that the protein domain is a molten globule *in vitro* and can be reversibly folded through protein-detergent interactions; this work is being readied for submission. As a Biomedical Engineering senior at Columbia, Madhav worked with a team that developed a prototype system that uses an electrooculogram-based user interface in order to help patients suffering from speech-impeding conditions to communicate with others using solely their eyes. This work shall be presented at the Engineering in Medicine and Biology Conference 2006 and has been selected as a finalist in the Student Design Competition. Outside of academics, Madhav served as Vice President to the Engineering Student Council in which capacity he managed a \$270,000 budget. He helped found and served as the Finance Chair for the first Relay for Life at Columbia, a fundraiser for the American Cancer Society which raised over \$80,000, and served as an Executive Board Member of the United Students of Color Council. Madhav was a founder and member of the Bhangra team, which introduced an energetic folk dance of Indian origin to the Columbia campus and competed nationally. His involvement and leadership in student activities at Columbia won him the “Leadership Legend” award as a “Bridge Builder” at the King’s Crown Leadership Awards. In the future, Madhav hopes to be the bridge that connects basic research and clinical applications and so has joined the National Medical Scientist Training Program at the NIH. He will attend Mt. Sinai School of Medicine, New York City.